

Notice of Allowability

Application No.

09/989,125

Examiner

Deborah Crouch, Ph.D.

Applicant(s)

CAMPBELL ET AL.

Art Unit

1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the decision in I-104,746, TD's filed 3/9/07 and interview 3/14/07.
2. ☒ The allowed claim(s) is/are 20,21,23-33 and 35-43.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 08/803,165.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 3/14/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Deborah Crouch, Ph.D.
Primary Examiner
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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sal Arrigo on March 14, 2007.

1. Rewrite claim 20 as follows:

20. A method of cloning an ungulate by nuclear transfer comprising:

(i) inserting a nucleus of an ungulate differentiated somatic cell, which has passed start in the mitotic cell cycle and is in the G1 phase of the cell cycle, into an unactivated, metaphase II-arrested, ungulate enucleated oocyte of the same species to reconstruct an embryo;

(ii) maintaining the reconstructed embryo without activation for a sufficient time to allow the reconstructed embryo to become capable of developing to term;

(iii) activating the resultant reconstructed embryo;

(iv) culturing said activated, reconstructed embryo; and

(v) transferring said cultured, reconstructed embryo to a host ungulate of the same species such that the reconstructed embryo develops to term.

32. A method of cloning an ungulate fetus by nuclear transfer comprising:

(i) inserting a nucleus of an ungulate differentiated somatic cell, which has passed start in the mitotic cell cycle and is in the G1 phase of the cell cycle, into an unactivated, metaphase II-arrested, ungulate enucleated oocyte of the same species to reconstruct an embryo;

(ii) maintaining the reconstructed embryo without activation for a sufficient time to allow the reconstructed embryo to become capable of developing to term;

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- (iii) activating the resultant reconstructed embryo;
- (iv) culturing said activated, reconstructed embryo; and
- (v) transferring said cultured, reconstructed embryo to a host ungulate of the same species such that the reconstructed embryo develops into a fetus.

2. Cancel claims 22 and 34.

3. In claim 23, delete "22" and insert -20--.

4. In claim 35, delete "34" and insert -32--.

5. In claim 24, line 2, delete "non-human mammal" and insert -ungulate--.

6. In claim 30, delete "non-human mammal" and insert -ungulate--.

7. In claim 36, delete "non-human mammal" and insert -ungulate--.

8. In claim 42, delete "non-human mammal" and insert -ungulate--.

Examiner's Comments:

1. The title has been changed to -Ungulates Produced by Nuclear Transfer of G1 Cells--.

The following is an examiner's statement of reasons for allowance: The judgment issue in Interference 104,746 has made the present claims allowable. Applicant has filed proper Terminal Disclaimers over 6,252,133; 6,548,741; 09/650,194; 09/685,862; 09/989,126; 09/989,128; 10/190,617 and 10/914,161.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Crouch, Ph.D. whose telephone number is 571-272-0727. The examiner can normally be reached on M-Fri, 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras can be reached on 571-272-4517. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Deborah Crouch, Ph.D.
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March 14, 2007